Former Electrolux Jefferson Site Jefferson, Iowa Webinar Discussion – August 26, 2015







### June 23, 2015 Meeting Follow-up Items

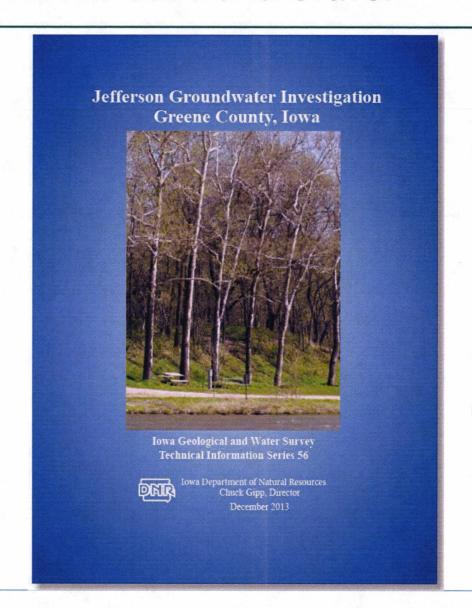
- Sampling of Pleistocene sand and gravel
- Confirm horizontal delineation of VOC impacts in yellow-brown till
- EPA information requests





#### Research on Pleistocene Sand and Gravel

- Conducted by Iowa Dept. of Natural Resources
- Iowa Source Water Protection Program
- Funded by USEPA
- Purpose: to delineate source water capture zone for City of Jefferson Water Supply Wells
- Scope
  - Collate existing data
  - Conduct ER survey
  - Model capture zone

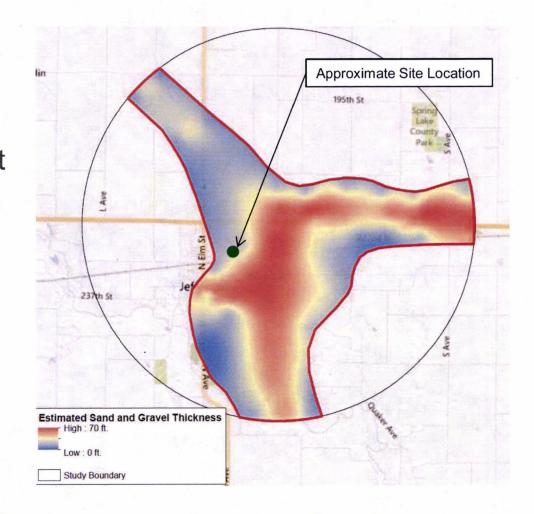






#### Sand and Gravel Extent and Thickness

- Based on boring logs and ER survey
- Thickness ranges from 0 to approximately 70 feet
- The geophysical models suggest that a "consistently thick sequence of glacial till (>100 ft. thick)" overlies the sand and gravel unit

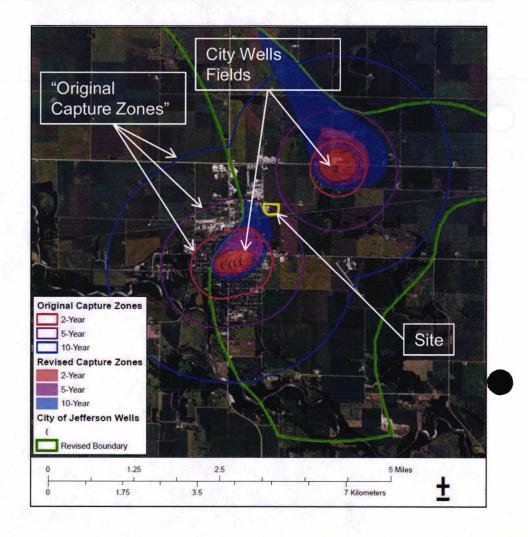






### **Capture Zone Analysis**

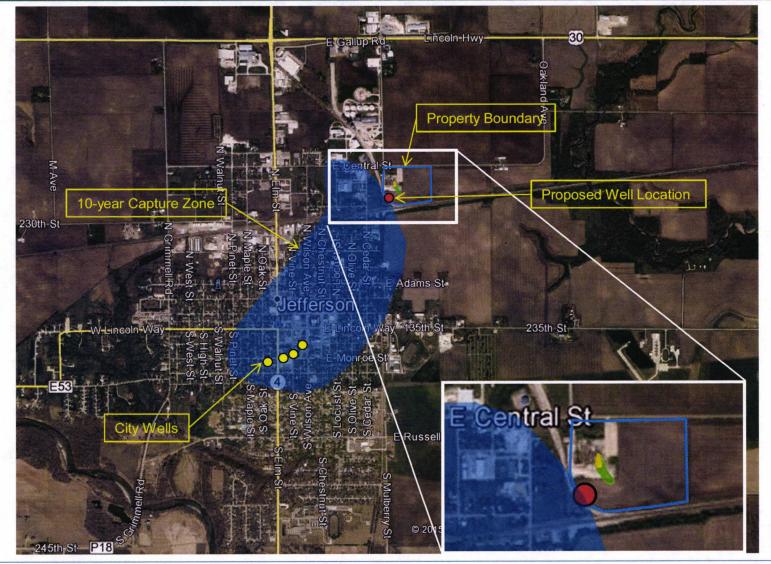
- City Operates two well fields
  - 3 wells to the northeast
  - 4 wells to the southwest
- "Original Capture Zones" based on "fixed radius circle capture zones" – no longer valid
- "Revised Capture Zones" based updated geologic model and new groundwater flow model







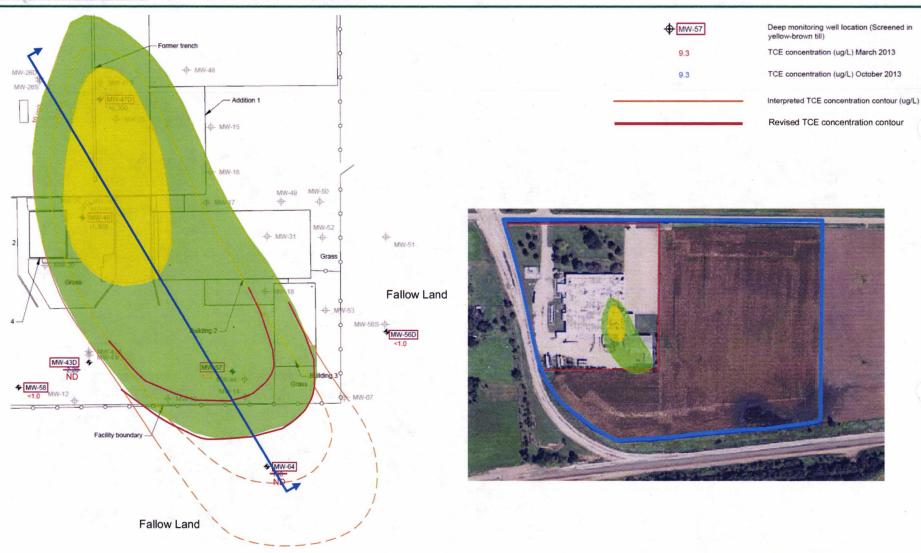
# Proposed Pleistocene Sand and Gravel Monitoring Well Location







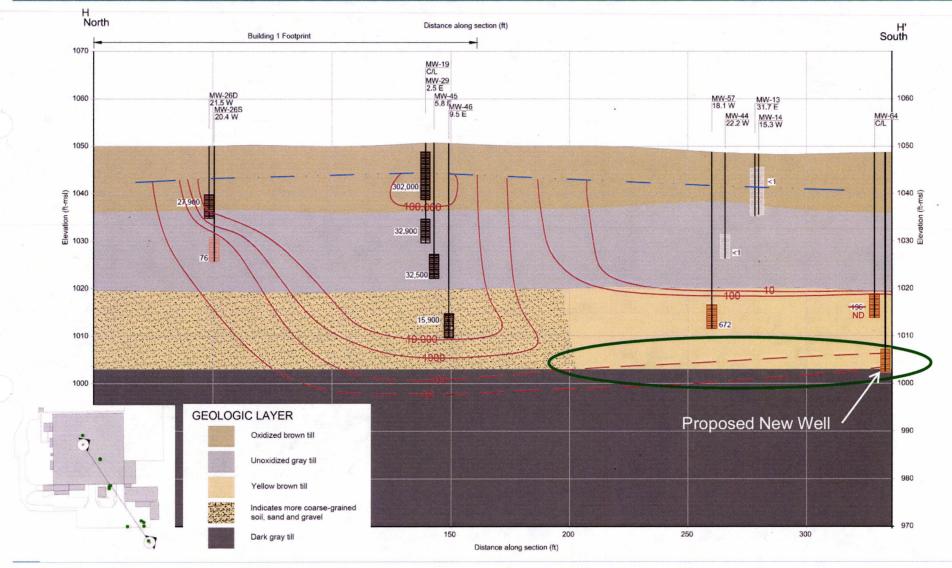
## TCE Concentrations in Yellow-brown Till Groundwater







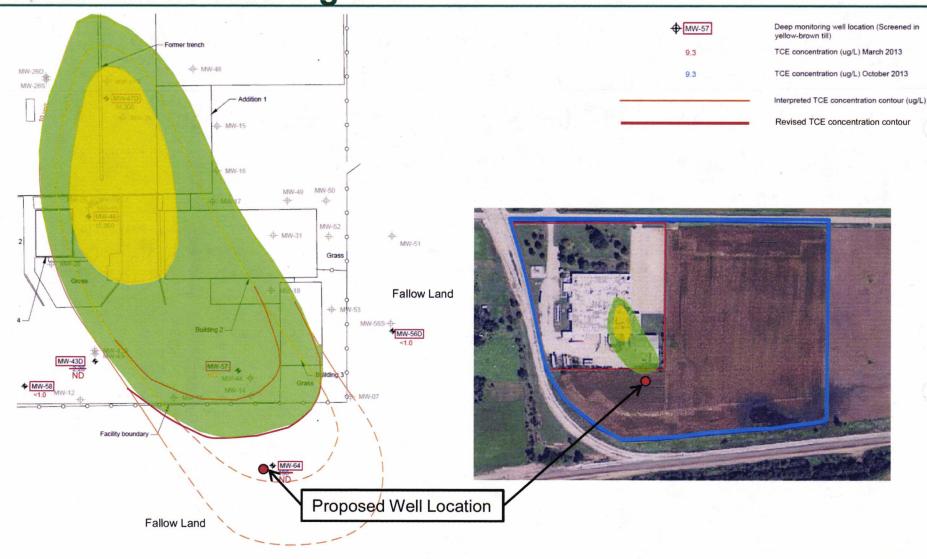
### **TCE Concentrations in Cross-section**







# Proposed Additional Yellow-brown Till Monitoring Well

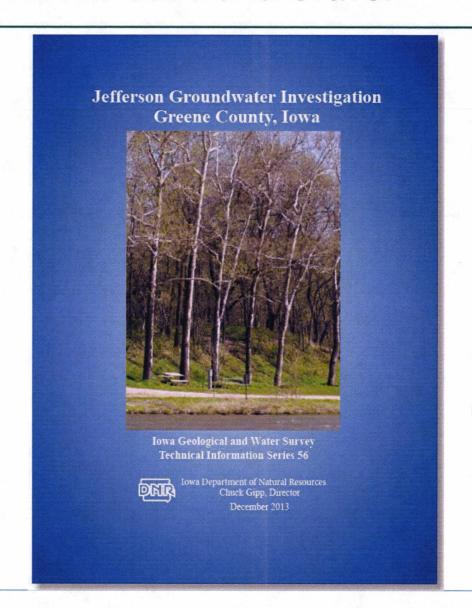






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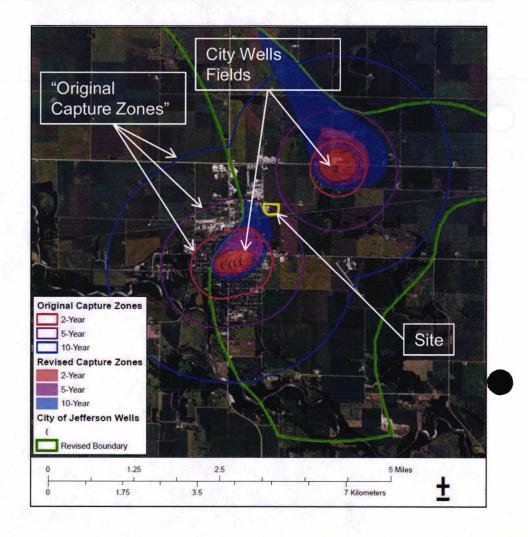






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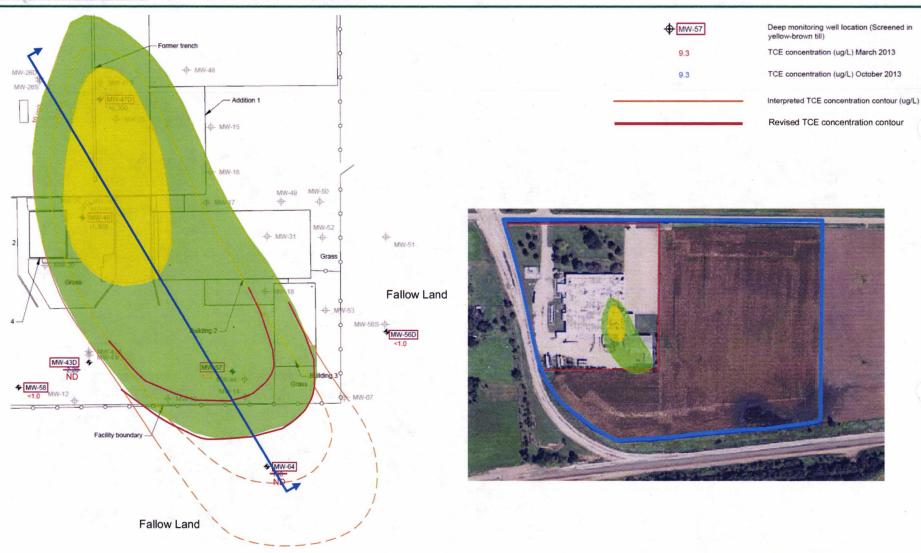
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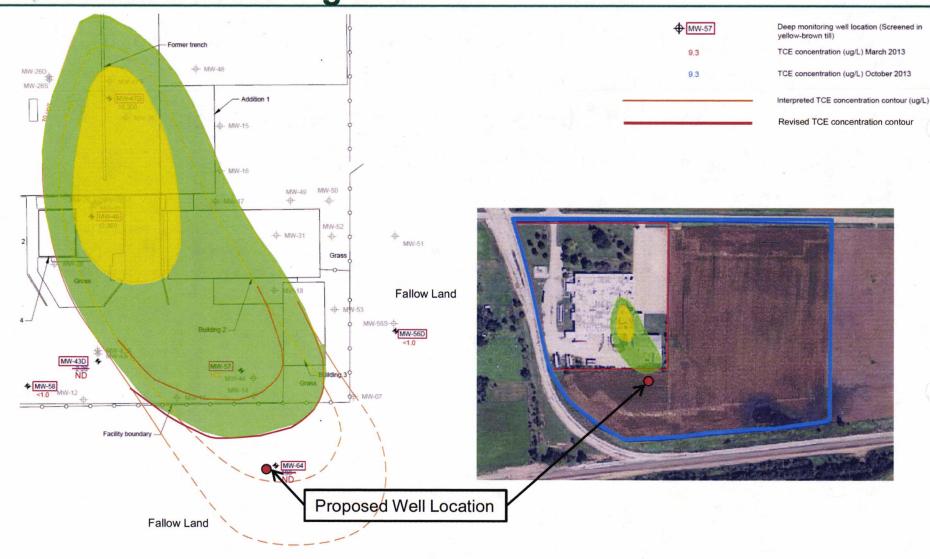
## TCE Concentrations in Yellow-brown Till Groundwater







# Proposed Additional Yellow-brown Till Monitoring Well







### **EPA Information Requests**

- Water quality comparison between monitoring wells MW-46 and MW-65
- Summary table of analytical data
- List of wells screened 0 to 15 ft. bgs and 15 to 30 ft. bgs
- Single .pdf file with all boring and well installation logs

